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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/782,855	02/23/2004	Young-sup Kim	Q78951	5482
23373	7590	08/29/2007	EXAMINER	
SUGHRUE MION, PLLC 2100 PENNSYLVANIA AVENUE, N.W. SUITE 800 WASHINGTON, DC 20037			PHAN, TUANKHANH D	
			ART UNIT	PAPER NUMBER
			2153	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/782,855	Applicant(s) KIM, YOUNG-SUP	
	Examiner TuanKhanh Phan	Art Unit 2153	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Merely claiming nonfunctional descriptive material, i.e., abstract ideas, stored on a computer-readable medium, in a computer, or on an electromagnetic carrier signal, does not make it statutory. See *Diehr*, 450 U.S. at 185-86, 209 USPQ at 8 (noting that the claims for an algorithm in *Benson* were unpatentable as abstract ideas because “[t]he sole practical application of the algorithm was in connection with the programming of a general purpose computer.”).

Claim 9 is rejected to because the claim fails to place the invention squarely within one statutory class of invention. On page 8 (paragraph 36, lines 1-6) of the instant specification, applicant has provided evidence that applicant intends “the computer-readable medium” to include carrier wave. As such, the claim is drawn to a form of energy. Energy is not one of the four categories of invention and therefore this claim is not statutory. Energy is not a series of steps or acts and thus is not a process. Energy is not a physical article or object and as such is not a machine or manufacture. Energy is not a combination of substances and therefore not a composition of matter.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-9 are rejected under 35 U.S.C. 102(e) as being anticipated by Nagarajan et al. (US Pub. 2004/0062248), hereinafter Nagarajan.

Regarding claim 1, Nagarajan teaches a method of managing a sliding window (para 0009, lines 1-9), comprising: (a) determining whether or not a sliding window, used for determining whether or not a received IP packet is to be transmitted or abandoned (para 0010, lines 7-20), is full of IP packets; and (b) updating sequence numbers stored in the sliding window by adding a size of the sliding window or predetermined amount to each of the sequence numbers if the sliding window is full of IP packets (para 0027, lines 1-9; para 0028, lines 1-10).

Regarding claim 2, Nagarajan teaches a method of managing a sliding window, comprising: (a) setting the size and sequence number information of a sliding window (para 0028, lines 1-10); (b) receiving an IP packet and reading a sequence number included in the received IP packet (para 0009, lines 1-9); (c) determining whether or not

the sequence number of the received IP packet is within a range of sequence numbers of the sliding window set in (a) (para 0009, lines 1-9); (d) if the sequence number of the received IP packet is within the range of the sequence numbers of the sliding window, transmitting the received IP packet to a specified network layer and otherwise, abandoning the received IP packet (para 0010, lines 7-20); (e) determining whether or not the sliding window is full of IP packets (para 0028, lines 1-10); and (f) updating the sliding window if the sliding window is full of IP packets (para 0028, lines 1-10).

Regarding claim 3, Nagarajan teaches the method of claim 2, wherein in (a), leftmost and rightmost values of the sliding window are set to 0 and 1 (para 0025, lines 10-17), respectively, and the size of the sliding window is set to n (para 0025, lines 1-10).

Regarding claim 4, Nagarajan teaches the method of claim 3, wherein if the sliding window is full of IP packets in (f), the sliding window is updated by adding a size of the sliding window set in (a) to each of the sequence numbers stored in the sliding window (para 0028, lines 1-10).

Regarding claim 5, Nagarajan teaches the method of claim 2, wherein in (a), leftmost and rightmost values of the sliding window are set to 0 and 1 (para 0025, lines 10-17), respectively, the size of the sliding window is set to n (para 0025, lines 1-10), and the extent to which each of the sequence numbers stored in the sliding window is to be increased is set to m (para 0025, lines 1-10; para 0028, lines 1-10).

Regarding claim 6, Nagarajan teaches the method of claim 5, wherein if the sliding window is full of IP packets in (f), the sliding window is updated by adding m to

each of the sequence numbers stored in the sliding window (para 0025, lines 1-10; para 0028, lines 1-10).

Regarding claim 7, Nagarajan teaches an apparatus for managing a sliding window, comprising: a sequence number information reading unit operable to receive an IP packet and read a sequence number included in the received IP packet (abstract; (para 0009, lines 1-9); memory operable to store sequence number information of a sliding window (para 0112, lines 1-9); and a comparison unit operable to compare the sequence number read by the sequence number information reading unit with the sequence number information of the sliding window (para 0010, lines 7-20), transmit the received IP packet to a specified network layer if the sequence number read by the sequence number information reading unit is within a range of sequence numbers stored in the sliding window, abandon the received IP packet otherwise, determine whether or not the sliding window is full of IP packets, and update the sliding window if the sliding window is full of IP packets (para 0010, lines 7-20).

Regarding claim 8, Nagarajan teaches the apparatus of claim 7, wherein the comparison unit is operable to update the sliding window by adding a size of the sliding window or a predetermined value to each of the sequence numbers stored in the sliding window (para 0010, lines 7-20).

Regarding claim 9, Nagarajan teaches a computer-readable recording medium on which a program enabling a method of managing a sliding window is recorded (para 0028, lines 1-10; para 0112, lines 1-9), the method of managing a sliding window comprising: (a) determining whether or not a sliding window, used for determining

whether or not a received IP packet is to be transmitted or abandoned, is full of IP packets (para 0010, lines 7-20); and (b) updating sequence numbers stored in the sliding window by adding a size of the sliding window to each of the sequence numbers if the sliding window is full of IP packets (para 0010, lines 7-20; para 0028, lines 1-10).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Lahti et al. US Pat. 7,237,262. Dated June, 26, 2007. Lahti et al. teach a system and method for anti-replay processing of a data packet.

Fredriksson. US Pub. 2004/00087963. Jan. 15, 2004. Fredriksson teaches sliding-window based signal monitoring.

Inquiries


Any inquiry concerning this communication or earlier communications from the examiner should be directed to TuanKhanh Phan whose telephone number is 571-270-3047. The examiner can normally be reached on Mon to Fri, 8:00am to 4:30pm EST, 1st Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenton B. Burgess can be reached on 571-272-3949. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2153

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

TKP



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